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CUN	MENT	ATION	PAGE

Form Approved OMB No. 0704-0188

Unclassified	1b. RESTRICTIVE MARKINGS					
2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION/AVAILABILITY OF REPORT					
2b. DECLASSIFICATION / DOWNGRADING SCHED	Unlimited					
4. PERFORMING ORGANIZATION REPORT NUMB	5. MONITORING ORGANIZATION REPORT NUMBER(S)					
DOD POP HMTR/AYD 92-009		DIIU				
6a. NAME OF PERFORMING ORGANIZATION	7a. NAME OF MONITORING ORGANIZATION ELECTEDEC 14 1992					
Packaging Division, AED	SMCAR-AEP	DEC14 1932				
6c ADDRESS (City, State, and ZIP Code) U.S. Army, ARDEC Picatinny Arsenal, NJ 07	7b. ADDRESS (City, State, and ZIP Code)					
8a. NAME OF FUNDING / SPONSORING ORGANIZATION	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER					
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS				
		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.	
11. TITLE (Include Security Classification) Performance Oriented Pack Electric M75 or Percussic 12. PERSONAL AUTHOR(S) Sniezek, Frank		for Primer	, Percussi	ion-		
13a TYPE OF REPORT 13b. TIME (FROM	OVERED TO	4. DATE OF REPORT (Year, Month, Day) 15. PAGE COUNT 92-11-02				
16. SUPPLEMENTARY NOTATION			 			
17. COSATI CODES FIELD GROUP SUB-GROUP		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)				
FIELD GROUP SUB-GROUP	Performance Oriented Packaging, POP, Primer, Percussion - Electric M75 or Percussion M82, Mil-B-2427 Wood Box					
19. ABSTRACT (Continue on reverse if necessar)			-D-2427 WC	Jou I	BOX	
This POP report is for the Primer Percussion - Elect box. This report describe packaging which is used a	ric M75 or Pr es the result	imer Percus s of testi	ssion M82/ ng conduct	/Mīl-	-B-2427 wood	
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED SAME AS	21. ABSTRACT SECURITY CLASSIFICATION Unclassified					
223. NAME OF RESPONSIBLE INDIVIDUAL STEVE RUFFINI	Unclassifie 22b TELEPHONE (7 (201) 724-25			OFFICE SYMBOL AR-AEP		

I. REPORT NUMBER: DOD POP HMTR/AYD 92-009

II. TITLE: Performance Oriented Packaging Report for Primer, Percussion -Electric M75 or Percussion M82

AUTHOR: Frank M. Sniezek

PERFORMING ACTIVITY: ARDEC

ADDRESS: Department of the Army

ARDEC, SMCAR-AEP

HQ, U.S. Army Armament, Munitions, and Chemical Command

Picatinny Arsenal, NJ 07806-5000

DATE: 5 Nov 92

Approved for public release; Distribution is unlimited

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VIII.

92-31312

3

1. DATA SHEET

CONTAINER

Type: Box UN Code: 4C1

Nomenclature: Box, Packing, Ammunition, for Primer, Percussion-

Electric M75 or Percussion M82

Specification Number: Type II, Grade A, Class 2, Mil-B-2427

Drawing Number: 8796679

Material: Wood

Gross Weight: 49 pounds

Outside Dimensions: $24 1/8 \times 12 \times 11 3/16$ Inside Dimensions: $21 1/4 \times 10 1/2 \times 9$

PRODUCT

Name: Primer Percussion - Electric M75 or Percussion M82

Drawing Number: 8861197

United Nations Number: 0314

Physical State: Solid

Amount per Container: 500 - Primer Percussion - Electric M75

500 - Primer Percussion M82

2. BACKGROUND, TESTS, AND RESULTS

Reference the following document:

a. 49CFR, October 1, 1991 Edition

Instead of testing the specific container used for the M82 or M75 Percussion Primer, three wooden boxes built to the same specification but packed with a fiberboard box loaded with sand were tested. The corresponding weight and dimensions of the tested box are as follows:

Gross Weight: 150 pounds
Outside Dimensions: $26 \ 1/4 \times 14 \ 3/8 \times 12 \ 3/4$ Inside Dimensions: $23 \ 1/8 \times 11 \ 3/4 \times 10 \ 11/16$

This falls within the guidelines for analogy IAW Variation III of para. 178.601(q)(3) of Reference a.

A Stacking Test was conducted on one container with a weight of 1600 pounds for 72 hours in lieu of three containers for 24 hours. This weight exceeds the minimum requirement for a 10 foot stack height which is 1412 pounds.

A Loose Cargo Test was conducted on three containers for one hour. The packages were tested at a vibration table frequency such that the bottom of the packages were raised 1/4 inch from the platform, which exceeds the requirement of 1/16 inch.

A Four Foot Drop Test was conducted on one of the containers that was subjected to the Loose Cargo Test. One container was dropped five times at different orientations as follows: top, bottom, long side, short side, and a top corner at the closure. This exceeds the requirement of one drop per container.

Test results indicated no leakage or spillage of the contents from the containers following any of the tests conducted, meeting the requirements of the 49CFR.